



Publication number: **0 684 578 A2**

EUROPEAN PATENT APPLICATION

Application number: 95302931.1

Int. Cl.⁸: G06K 11/12

Date of filing: 28.04.95

Priority: 23.05.94 US 247840

Date of publication of application:
29.11.95 Bulletin 95/48

Designated Contracting States:
AT BE CH DE ES FR GB IT LI NL SE

Applicant: International Business Machines Corporation
Old Orchard Road
Armonk, N.Y. 10504 (US)

Inventor: Buchanan, William Andrew
6 Parkville Road,
Belshill
Strathclyde,
Scotland ML4 1JD (GB)
Inventor: Eardley, Richard Allen
12 Viking Way,

Largs
Ayrshire,
Scotland KA30 9NL (GB)
Inventor: Tizzard, Anthony Richard
10 Arran View,
Largs
Ayrshire,
Scotland KA30 9ER (GB)
Inventor: Utley, Brian George
1930 SW 8th Street
Boca Raton,
Florida 33486 (US)

Representative: Williams, Julian David
IBM United Kingdom Limited,
Intellectual Property Department,
Hursley Park
Winchester,
Hampshire SO21 2JN (GB)

Simplified digital pad sensor.

A touchpad sensor comprising a first plurality of electrically conductive strips positioned proximate to a second plurality of electrically conductive strips. The conductive strips in each plurality lie substantially in a single plane and the two pluralities are skewed relative to one another in plan view. Ideally, the pluralities are aligned orthogonally. The conductive strips are separated by insulators that extend beyond the surface of at least one of the pluralities

of conductors to separate the conductors of one plurality from the conductors of the other plurality until a localized pressure is applied to a region of the pad. When a localized pressure is applied, the conductors and insulators deform until a conductor from the first plurality forms an electrically conducting path with at least one conductor from the second plurality, which can be detected using banks of drivers and receivers.

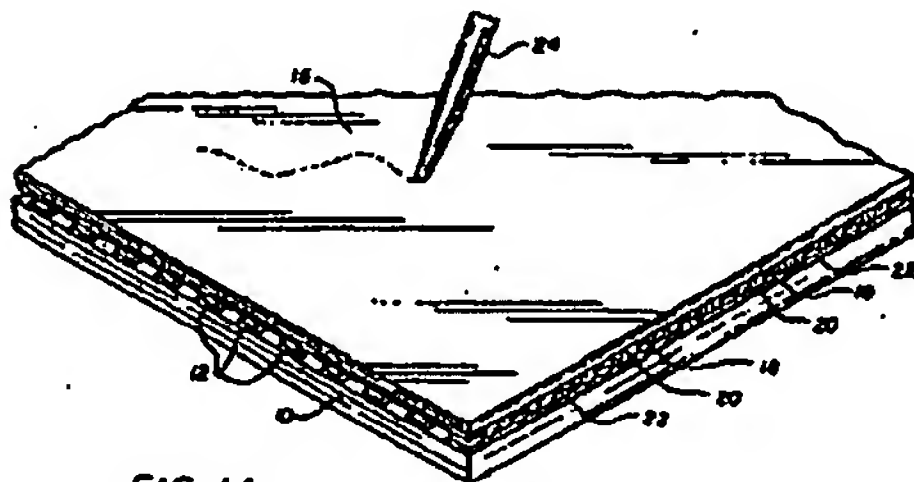


FIG. 1A

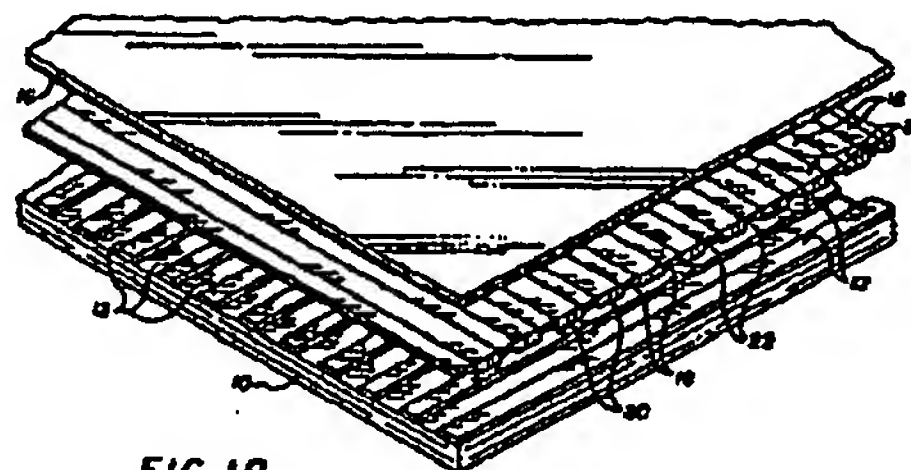


FIG. 1B

EP 0 684 578 A2

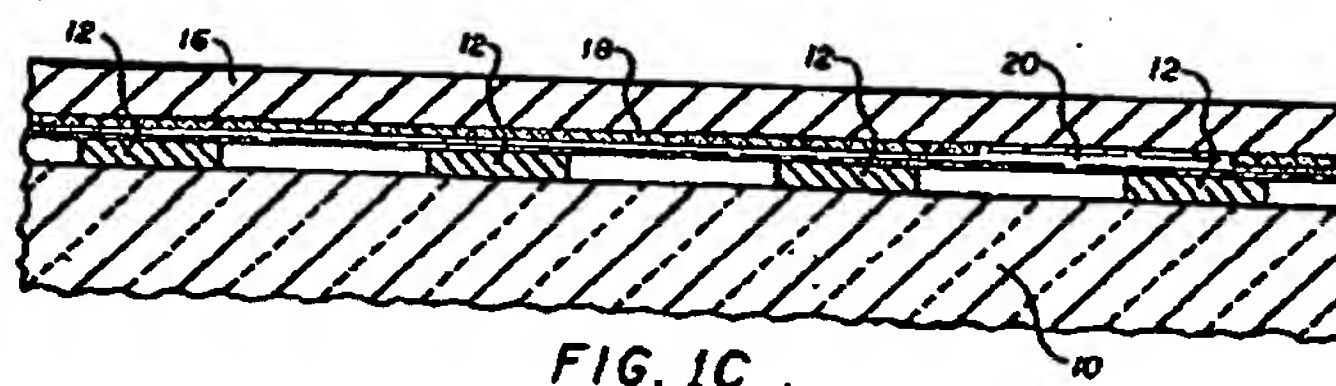


FIG. 1C

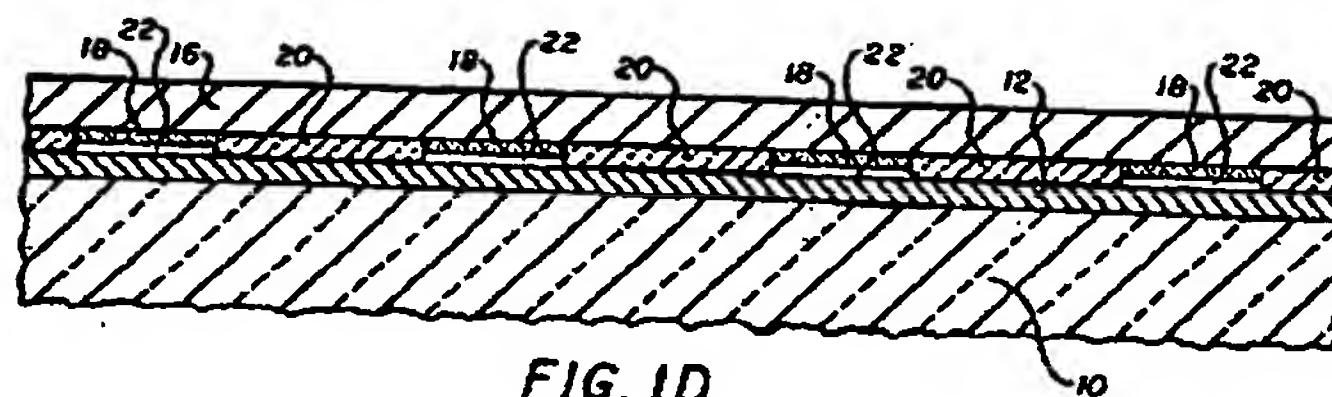


FIG. 1D

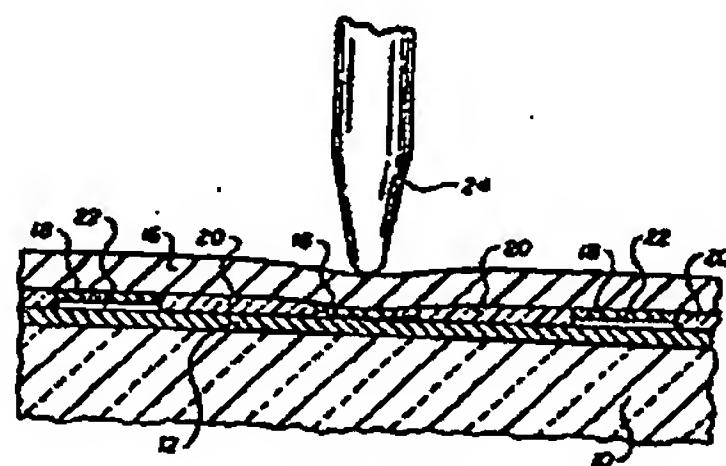


FIG. 1E